



IN THE CLAIMS:

Please amend claims 28-38 and 40-54, and add new claim 55 as follows.

1-27. Cancelled.

28. (Currently Amended) A method, comprising: ~~for~~
providing location privacy for a terminal node in communication with a
communication partner node in a communication network system comprising at least a
first communication network, at least one server entity, and a plurality of agent entities;
~~wherein~~

identifying a respective node communicating via said communication network
system ~~is identified~~ by its permanent network address and ~~is addressable~~ addressing the
respective node by a temporary network address, ~~at least one server entity, a plurality of~~
~~agent entities;~~ ~~wherein~~

maintaining by each of said at least one server entities ~~maintains~~ a record of said
plurality of agent entities and their respective location within the network system;

~~said method comprising the steps of:~~

requesting, by said terminal node, said at least one server entity for location
privacy;

selecting, at said at least one server entity, a specific one of said plurality of agent
entities, based on data maintained in said record of said server entity and said temporary

network address of said requesting terminal node; and

communicating messages between said terminal node and said communication partner node via said selected one of said agent entities.

29. (Currently Amended) A-The method according to claim 28, ~~wherein~~further comprising:

configuring said request includes to include the network address of said communication partner node with which a communication is desired to be performed, the permanent network address of said requesting terminal node, and said temporary network address of said requesting terminal node by which it is addressable within said communication network system.

30. (Currently Amended) A-The method according to claim 28, ~~wherein~~further comprising:

deriving said respective location of said agent entities ~~is derivable~~ based on a network domain to which the agent entity is assigned; and,

representing the domain ~~being represented~~ by a network address range in the network.

31. (Currently Amended) A-The method according to claim 30, ~~wherein~~further comprising:

basing said selecting ~~is based on~~ said known network address of said communication partner node with which a communication is desired to be performed, which is included in said request.

32. (Currently Amended) ~~A-~~The method according to claim 31, wherein said selecting comprises ~~the steps of~~:

first retrieving a first network domain represented by a network address range to which address range the temporary address of the requesting terminal node belongs;

second retrieving a second network domain represented by a network address range to which address range the address of the communication partner node belongs;
and

determining the agent entity to be selected, based on said retrieved information.

33. (Currently Amended) ~~A-~~The method according to claim 28, further comprising ~~a step of~~:

informing said requesting terminal node about the selected agent entity before communicating messages.

34. (Currently Amended) ~~A-~~The method according to claim 28, further comprising ~~the steps of~~:

creating, by said terminal node at said selected agent entity, a mapping between

the terminal node's permanent network address and its temporary network address; and
creating, by said terminal node at said communication partner node, a mapping
between the terminal node's permanent network address and the selected agent entity's
address.

35. (Currently Amended) A communication network system, comprising:
at least a first communication network, wherein a respective node communicating
via said communication network system is identified by its permanent network address
and addressable by a temporary network address;
at least one server entity;
a plurality of agent entities, wherein each of said at least one server entity
maintains a record of said plurality of agent entities and their location within the network
system;
a database means-configured to maintain a record of said plurality of agent
entities and their respective location within said communication network system; and
a ~~processing~~processor means-configured to select a specific one of said plurality
of agent entities, based on data maintained in said record and a temporary network
address of a requesting terminal node.

36. (Currently Amended) ~~A~~The communication network system according to
claim 35, wherein:

said respective location of said agent entities is derivable based on a network domain to which the agent entity is assigned, the domain being represented by a network address range in the network.

37. (Currently Amended) ~~A-~~The communication network system according to claim 35, wherein:

to each of said communication networks there is associated one of said server entities.

38. (Currently Amended) ~~A-~~The communication network system according to claim 35, wherein:

to each of said communication networks there is associated a plurality of said agent entities.

39. (Cancelled)

40. (Currently Amended) ~~A-~~The communication network system according to claim 35, wherein:

said respective location of said agent entities is derivable based on a network domain to which the agent entity is assigned, the domain being represented by a network address range in the network.

41. (Currently Amended) A-The communication network system according to claim 40, wherein said ~~processing means~~processor comprises:

~~selection means which~~a selector configured to comprise~~comprises~~ a first ~~retrieving means adapted~~unit configured to retrieve a first network domain represented by a network address range to which address range the temporary address of the requesting terminal node belongs;

a second retrieving means adaptedunit configured to retrieve a second network domain represented by a network address range to which address range the address of the communication partner node belongs; and

a determination means adaptedunit configured to determine the agent entity to be selected, based on said retrieved information.

42. (Currently Amended) A-The communication network system according to claim 35, wherein:

said record is configured by a network operator dependent on a topology of a communication network forming a communication network system.

43. (Currently Amended) A-The communication network system according to claim 35, wherein:

said record is configured by a network operator dependent on a topology of a

communication network forming a communication network system, and said server entity is ~~adapted~~ configured to extend said record by adding record information from other server entities within said communication network system.

44. (Currently Amended) ~~A-~~ The communication network system according to claim 35, further comprising:

~~transmission means adapted~~ a transmitter configured to receive and send information used for forming and maintaining said record, receive requests from terminal nodes, and configured to send processing results to a requesting terminal.

45. (Currently Amended) ~~A-~~ The communication network system according to claim 44, wherein:

said transmission ~~means is adapted~~ unit is configured to send processing results to a selected agent entity.

46. (Currently Amended) ~~A-~~ The communication network system according to claim 35, wherein each of said plurality of agent entities comprises

a memory ~~means-unit configured~~ adapted to cache a mapping of a permanent address identifying a terminal node to a temporary address of said terminal node indicative of a location of said terminal node, and

a routing ~~means-adapted~~ unit configured to forward data packets received from

said terminal node to an addressed communication partner node and to forward data packets received from said communication partner to said terminal node, wherein said forwarding is based on the cached mapping information in said memory ~~means~~unit.

47. (Currently Amended) A communication network system, comprising:

- at least a first communication network, wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
- at least one server entity;
- a plurality of agent entities; and wherein
- each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is ~~adapted configured to carry out the method according to claim 28~~

provide location privacy for a terminal node in communication with a communication partner node in said communication network system comprising at least a first communication network,

identify a respective node communicating via said communication network system by its permanent network address and address the respective node by a temporary network address,

maintain by each of said at least one server entities a record of said plurality of agent entities and their respective location within the network system,

request, by said terminal node, said at least one server entity for location
privacy,

select, at said at least one server entity, a specific one of said plurality of
agent entities, based on data maintained in said record of said server entity and said
temporary network address of said requesting terminal node, and
communicate messages between said terminal node and said
communication partner node via said selected one of said agent entities.

48. (Currently Amended) ~~A~~ The communication network system according to
claim 42, wherein:

said record is configured by a network operator dependent on a topology of a
communication network forming a communication network system, and said server entity
is ~~adapted~~ configured to extend said record by adding record information from other
server entities within said communication network system.

49. (Currently Amended) A communication network system, comprising:
at least a first communication network, wherein a respective terminal node
communicating via said communication network system is identified by its permanent
network address and addressable by a temporary network address;
at least one server entity; and

a plurality of agent entities; ~~and~~ wherein

each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is ~~adapted~~configured to configure said request to include the network address of said communication partner node with which a communication is desired to be performed, the permanent network address of said requesting terminal node, and said temporary network address of said requesting terminal node by which it is addressable within said communication network system~~carry out the method according to claim 29.~~

50. (Currently Amended) A communication network system, comprising:
at least a first communication network, wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
at least one server entity; and
a plurality of agent entities; ~~and~~ wherein
each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is ~~adapted~~configured to derive said respective location of said agent entities based on a network domain to which the agent entity is assigned, and represent the domain by a network address range in the network~~carry out the method according to claim 30.~~

51. (Currently Amended) A communication network system, comprising:

at least a first communication network, wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;

at least one server entity; and

a plurality of agent entities; ~~and~~ wherein

each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is ~~adapted~~ configured to base said selecting on said known network address of said communication partner node with which a communication is desired to be performed, which is included in said request ~~carry out the method according to claim 31.~~

52. (Currently Amended) A communication network system, comprising:

at least a first communication network, wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;

at least one server entity; and

a plurality of agent entities; ~~and~~ wherein

each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is ~~adapted~~ configured to

first retrieve a first network domain represented by a network address range to

which address range the temporary address of the requesting terminal node belongs,

second retrieve a second network domain represented by a network address range
to which address range the address of the communication partner node belongs, and

determine the agent entity to be selected, based on said retrieved information~~carry~~
~~out the method according to claim 32.~~

53. (Currently Amended) A communication network system, comprising:
at least a first communication network, wherein a respective terminal node
communicating via said communication network system is identified by its permanent
network address and addressable by a temporary network address;

at least one server entity; and

a plurality of agent entities; ~~and~~ wherein

each of said at least one server entity maintains a record of said plurality of agent
entities and their location within the network system, wherein said terminal node is
~~adapted~~ configured to inform said requesting terminal node about the selected agent entity
before communicating messages~~carry out the method according to claim 33.~~

54. (Currently Amended) A communication network system, comprising:
at least a first communication network, wherein a respective terminal node
communicating via said communication network system is identified by its permanent
network address and addressable by a temporary network address;

at least one server entity; and

a plurality of agent entities; ~~and~~ wherein

each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is ~~adapted~~ configured to

create, by said terminal node at said selected agent entity, a mapping between the terminal node's permanent network address and its temporary network address, and

create, by said terminal node at said communication partner node, a mapping between the terminal node's permanent network address and the selected agent entity's address ~~carry out the method according to claim 34.~~

55. (New) A communication network system, comprising:

at least a first communication network, wherein a respective node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;

at least one server entity;

a plurality of agent entities, wherein each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system;

database means for maintaining a record of said plurality of agent entities and their respective location within said communication network system; and

processing means for selecting a specific one of said plurality of agent entities, based on data maintained in said record and a temporary network address of a requesting terminal node.